IN THE CLAIMS

Please amend the claims as follows:

Claims 1-17 (Canceled).

Claim 18 (Currently Amended): A calixresorcinarene compound shown by formula (1),

$$RO$$
 H_3C
 CH_3
 CH

wherein R individually represents a hydrogen atom, a 1-tetrahydropyranyl group, a 1-tetrahydrofuranyl group, or one or more organic groups selected from the group consisting of the organic groups shown by the following formulas,

wherein n individually represents an integer of 1 to 50,

provided that a compound in which R is selected only from a hydrogen atom, a 1-tetrahydropyranyl group and a 1-tetrahydrofuranyl group is excluded.

Claim 19 (Previously Presented): A method for the purification of a calixresorcinarene compound according to claim 18 comprising washing said compound with an acidic aqueous solution and processing the washed compound with an ion-exchange resin.

Claim 20 (Previously Presented): A photoresist base material for extreme ultraviolet radiation and/or an electron beam comprising the calixresorcinarene compound according to claim 18 and shown by formula (1).

Claim 21 (Previously Presented): A photoresist composition for extreme ultraviolet radiation and/or an electron beam comprising the photoresist base material according to claim 20 and a solvent.

Claim 22 (Previously Presented): The photoresist composition according to claim 21, further comprising a photoacid generator.

Claim 23 (Previously Presented): The photoresist composition according to claim 21, further comprising a basic organic compound as a quenching agent.

Claims 24-32 (Cancelled).

Claim 33 (Previously Presented): A method for microfabrication by lithography using the photoresist composition according to claim 21.

Claim 34 (Previously Presented): A semiconductor device prepared using the photoresist composition according to claim 21.

Claim 35 (Currently Amended): A photoresist composition comprising a photoresist base material that is an extreme ultraviolet radiation-reactive organic compound shown by formula (2), obtained by washing with an acidic aqueous solution and processing with an ion-exchange resin, a photoacid generator or a photobase generator, and a quenching agent,

wherein A is an organic group represented by any of the following formulas,

B, C, and D are individually a hydrogen atom, a tert-butyl group, tert-butyloxycarbonylmethyl group, tert-butyloxycarbonyl group, 1-tetrahydropyranyl group, 1-

tetrahydrofuranyl group, 1-ethoxyethyl group, 1-phenoxyethyl group, an organic group shown by the formula,

$$-\left(\begin{array}{c} H_2 \\ C \end{array}\right) P - \left(\begin{array}{c} O \\ II \\ C \end{array}\right) P$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10, or an organic group represented by any of the following formulas,

wherein Ar is a phenyl group or a naphthyl group substituted with RO- and/or ROCO-, wherein R is a tert-butyl group, tert-butyloxycarbonylmethyl group, tert-butyloxycarbonyl group, 1-tetrahydropyranyl group, 1-tetrahydrofuranyl group, 1-ethoxyethyl group, 1-phenoxyethyl group, or an organic group shown by the following formula,

$$-\left(\begin{array}{c} H_2 \\ C \end{array}\right)_S P - \left(\begin{array}{c} O \\ O - C - O - Q \end{array}\right)_r$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10,

X, Y, and Z individually represent a single bond or an ether bond, and 1 + m + n = 2 or 3.

Claim 36 (Previously Presented): The photoresist composition according to claim 35, wherein the extreme ultraviolet-radiation reactive organic compound is in an amorphous state at room temperature and the average diameter of the molecule is 2 nm or less.

Claim 37 (Cancelled).

Claim 38 (Currently Amended): A photoresist composition comprising a photoresist base material that is a radiation-reactive organic compound shown by formula (2), obtained by washing with an acidic aqueous solution and processing with an ion-exchange resin, a photoacid generator or a photobase generator, and a quenching agent,

wherein A is an organic group represented by the following formula,

B, C, and D are individually a tert-butyloxycarbonylmethyl group, tert-butyloxycarbonyl group, or an organic group shown by formula,

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10,

X, Y, and Z individually represent a single bond or an ether bond, and 1 + m + n = 3.

Claim 39 (Previously Presented): The photoresist composition according to claim 38, wherein the organic group shown by the following formula,

$$\frac{-\left(\frac{H_2}{C}\right)_s}{\left(\frac{H_2}{C}\right)_s}P - \left(\frac{O}{C} - O - Q\right)_r$$

is a 4-(tert-butoxycarbonyloxy)benzyl group or a 3,5-di(tert-butoxycarbonyloxy)benzyl group.

Claim 40 (Previously Presented): The photoresist composition according to claim 38, wherein the radiation is extreme ultraviolet radiation or an electron beam.

Claim 41 (Previously Presented): The photoresist composition according to claim 35, wherein at least one of B, C, and D is a hydrogen atom and X, Y, and Z are ether bonds.

Claim 42 (Previously Presented): The photoresist composition according to claim 35, wherein the basic impurity content of the photoresist base material is not more than 10 ppm.

Claim 43 (Previously Presented): A photoresist composition comprising a photoresist base material that is an extreme ultraviolet radiation-reactive organic compound shown by

formula (2), obtained by washing with an acidic aqueous solution and processing with an ionexchange resin, a photoacid generator or a photobase generator, and a quenching agent,

wherein A is an organic group represented by the following formula,

B, C, and D are individually an organic group shown by formula,

$$-\left(\begin{array}{c}H_2\\C\end{array}\right)_S P - \left(\begin{array}{c}O\\I\\O-C-O-Q\end{array}\right)_T$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10, or an organic group represented by any of the following formulas,

$$Ar$$
 — Ar — CH_2 — Ar — — Ar — — Ar — — Ar —

wherein Ar is a phenyl group or a naphthyl group substituted with RO- and/or ROCO-, wherein R is a tert-butyl group, tert-butyloxycarbonyl group, tert-butyloxycarbonyl

group, 1-tetrahydropyranyl group, 1-tetrahydrofuranyl group, 1-ethoxyethyl group, 1-phenoxyethyl group, or an organic group shown by the following formula,

$$\frac{-\left(\frac{H_2}{C}\right)_S}{\left(\frac{H_2}{C}\right)_S}P - \left(\frac{O}{C} - O - Q\right)_T$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10,

X, Y, and Z individually represent a single bond or an ether bond, and 1 + m + n = 8.

Claim 44 (Previously Presented): The photoresist composition according to claim 43, wherein the extreme ultraviolet-radiation reactive organic compound is in an amorphous state at room temperature and the average diameter of the molecule is 2 nm or less.

Claim 45 (Previously Presented): The photoresist composition according to claim 43, wherein A is the organic group represented by the following formula,

B, C, and D are individually an organic group shown by the following formula,

$$\frac{H_2}{C} = \left(\begin{array}{c} H_2 \\ C \end{array} \right) = \left(\begin{array}{c} O \\ O - C - O - Q \end{array} \right)$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10, and

X, Y, and Z are ether bonds.

Claim 46 (Previously Presented): A photoresist composition comprising a photoresist base material that is a radiation-reactive organic compound shown by formula (2), obtained by washing with an acidic aqueous solution and processing with an ion-exchange resin, a photoacid generator or a photobase generator, and a quenching agent,

wherein A is an organic group represented by the following formula,

B, C, and D are individually an organic group shown by formula,

$$\frac{-\left(\frac{H_2}{C}\right)_s}{\left(\frac{H_2}{C}\right)_s}P + \left(\frac{O}{C} - O - Q\right)_r$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10,

X, Y, and Z individually represent a single bond or an ether bond, and 1 + m + n = 8.

Claim 47 (Previously Presented): The photoresist composition according to claim 46, wherein the organic group shown by the following formula,

$$\frac{-\left(-\frac{H_2}{C}\right)_s}{s}P - \left(-\frac{O}{C} - O - Q\right)_r$$

is a 4-(tert-butoxycarbonyloxy)benzyl group or a 3,5-di(tert-butoxycarbonyloxy)benzyl group.

Claim 48 (Previously Presented): The photoresist composition according to claim 46, wherein the radiation is extreme ultraviolet radiation or an electron beam.

Claim 49 (Previously Presented): The photoresist composition according to claim 46, wherein the basic impurity content of the photoresist base material is not more than 10 ppm.

Claim 50 (New): A photoresist composition comprising a photoresist base material that is an extreme ultraviolet radiation-reactive organic compound shown by formula (2), obtained by washing with an acidic aqueous solution and processing with an ion-exchange resin, a photoacid generator or a photobase generator, and a quenching agent,

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wherein A is an organic group represented by the following formula,

B, C, and D are individually a hydrogen atom, a tert-butyl group, tert-butyloxycarbonylmethyl group, 1-tetrahydropyranyl group, 1-tetrahydrofuranyl group, 1-tetrahydrofuranyl group, 1-tetrahydrofuranyl group, 1-phenoxyethyl group, an organic group shown by the formula,

$$\frac{H_2}{C} = \left(\begin{array}{c} O \\ O \\ S \end{array} \right) = \left(\begin{array}{c} O \\ O \\ C \end{array} \right) = \left(\begin{array}{c}$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10, or an organic group represented by any of the following formulas,

$$Ar - CH_2 - Ar - CH_2 - CH_2 - Ar - CH_2 - CH_$$

wherein Ar is a phenyl group or a naphthyl group substituted with RO- and/or ROCO-, wherein R is a tert-butyl group, tert-butyloxycarbonylmethyl group, tert-butyloxycarbonyl group, 1-tetrahydropyranyl group, 1-tetrahydrofuranyl group, 1-ethoxyethyl group, 1-phenoxyethyl group, or an organic group shown by the following formula,

$$\frac{-\left(\frac{H_2}{C}\right)_s}{s}P - \left(\frac{O}{C} - O - Q\right)_r$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10, and

X, Y, and Z individually represent a single bond or an ether bond, and l+m+n=2 or 3.

Claim 51 (New): The photoresist composition according to claim 50, wherein the extreme ultraviolet-radiation reactive organic compound is in an amorphous state at room temperature and the average diameter of the molecule is 2 nm or less.

Claim 52 (New): The photoresist composition according to claim 50, wherein at least one of B, C, and D is a hydrogen atom and X, Y, and Z are ether bonds.

Claim 53 (New): The photoresist composition according to claim 50, wherein the basic impurity content of the photoresist base material is not more than 10 ppm.

Claim 54 (New): A photoresist composition comprising a photoresist base material that is an extreme ultraviolet radiation-reactive organic compound shown by formula (2), obtained by washing with an acidic aqueous solution and processing with an ion-exchange resin, a photoacid generator or a photobase generator, and a quenching agent,

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wherein A is an organic group represented by the following formula,

B, C, and D are individually a hydrogen atom, a tert-butyl group, tert-butyloxycarbonylmethyl group, tert-butyloxycarbonyl group, 1-tetrahydropyranyl group, 1-tetrahydrofuranyl group, 1-ethoxyethyl group, 1-phenoxyethyl group, an organic group shown by the formula,

$$-\left(\begin{matrix} H_2 \\ C \end{matrix}\right)_{S} P - \left(\begin{matrix} O \\ O - C \end{matrix}\right)_{C} O - Q \right)_{r}$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10, or an organic group represented by any of the following formulas,

$$Ar - CH_2 - Ar - CH_2 -$$

wherein Ar is a phenyl group or a naphthyl group substituted with RO- and/or ROCO-, wherein R is a tert-butyl group, tert-butyloxycarbonylmethyl group, 1-tetrahydropyranyl group, 1-tetrahydrofuranyl group, 1-phenoxyethyl group, or an organic group shown by the following formula,

$$- \left(\begin{array}{c} H_2 \\ C \end{array} \right)_S P - \left(\begin{array}{c} O \\ O - C - O - Q \end{array} \right)_T$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10, and

X, Y, and Z individually represent a single bond or an ether bond, and l+m+n=2 or 3.

Claim 55 (New): The photoresist composition according to claim 54, wherein the extreme ultraviolet-radiation reactive organic compound is in an amorphous state at room temperature and the average diameter of the molecule is 2 nm or less.

Claim 56 (New): The photoresist composition according to claim 54, wherein at least one of B, C, and D is a hydrogen atom and X, Y, and Z are ether bonds.

Claim 57 (New): The photoresist composition according to claim 54, wherein the basic impurity content of the photoresist base material is not more than 10 ppm.

Claim 58 (New): A photoresist composition comprising a photoresist base material that is an extreme ultraviolet radiation-reactive organic compound shown by formula (2), obtained by washing with an acidic aqueous solution and processing with an ion-exchange resin, a photoacid generator or a photobase generator, and a quenching agent,

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$$\begin{pmatrix}
C & Y \\
X & X \\
A & Z \\
D & D
\end{pmatrix}_{n}$$
(2)

wherein A is an organic group represented by the following formula,

B, C, and D are individually a hydrogen atom, a tert-butyl group, tert-butyloxycarbonyl group, 1-tetrahydropyranyl group, 1-tetrahydrofuranyl group, 1-ethoxyethyl group, 1-phenoxyethyl group, an organic group shown by the formula,

$$-\left(\begin{array}{c}H_2\\C\end{array}\right)_{S}P-\left(\begin{array}{c}O\\C\end{array}-O-Q\right)_{r}$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10, or an organic group represented by any of the following formulas,

$$Ar$$
 Ar CH_2 Ar Ar Ar Ar Ar

wherein Ar is a phenyl group or a naphthyl group substituted with RO- and/or ROCO-, wherein R is a tert-butyl group, tert-butyloxycarbonylmethyl group, tert-butyloxycarbonyl group, 1-tetrahydropyranyl group, 1-tetrahydrofuranyl group, 1-ethoxyethyl group, 1-phenoxyethyl group, or an organic group shown by the following formula,

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$$-\left(\begin{matrix} H_2 \\ C \end{matrix}\right)_S P - \left(\begin{matrix} O \\ O - C - O - Q \end{matrix}\right)_T$$

wherein P is an aromatic group having 6 to 20 carbon atoms with a valence of (r + 1), Q represents an organic group having 4 to 30 carbon atoms, r is an integer of 1 to 10, and s is an integer of 0 to 10, and

 $X,\,Y,\,$ and Z individually represent a single bond or an ether bond, and 1+m+n=2 or 3.

Claim 59 (New): The photoresist composition according to claim 58, wherein the extreme ultraviolet-radiation reactive organic compound is in an amorphous state at room temperature and the average diameter of the molecule is 2 nm or less.

Claim 60 (New): The photoresist composition according to claim 58, wherein at least one of B, C, and D is a hydrogen atom and X, Y, and Z are ether bonds.

Claim 61 (New): The photoresist composition according to claim 58, wherein the basic impurity content of the photoresist base material is not more than 10 ppm.